KT-930EE

DUAL BAND AMATEUR RADIO
VHF / UHF FM HANDHELD TRANSCEIVER

144-146 MHz / 128CH / 5W
430-440 MHz / 128CH / 4W
PC PROGRAMMABLE

INSTRUCTION MANUAL

INTEK®

Declaration of Conformity

EC Certificate of Conformity

(to EC Directive 2006/95, 2004/108, 99/5)

DECLARATION OF CONFORMITY

With the present declaration, we certify that the following products :

INTEK KT-930EE

comply with all the technical regulations applicable to the above mentioned products in accordance with the EC Directives 2006/95/EC, 2004/108/EC, 99/5/EC.

Type of product :	Amateur Radio Equipment VHF/UHF
Details of applied standards :	EN 300 086-1 V1.4.1, EN 300-086-2 V1.3.1 EN 301 489-1 V1.8.1, EN 301 489-5 V1.3.1 EN 60950-1+A11
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Segrate, 09/11/2011

dr. Vittorio Zanetti

(C.E.O.)

NOTICE !

It is recommended to carefully read this owner's manual before using the product. This will also help the user to prevent using the radio in violation of the regulations valid in the country where the product is used, as well as to avoid any possible interferences with other services.

NOTICE !

This transceiver has been factory programmed, in order to use the product immediately after purchase. The programming includes the activation of channels/frequencies in the VHF and UHF FM Amateur Bands, according to the technical rules in force for the use of this bands.

NOTICE !

This transceiver is programmable via PC, using the dedicated software and the PC interface cable (optional items). Any programming or modification of the original default setting must be made by a specialised technician or by an authorised service centre. Some functions of this transceiver might be programmed in violation of the technical rules in force for the use of the VHF and UHF FM bands. It is the user's responsibility to check that any modification to the programming will be done in compliance with the current regulations. Any modification to the product, alteration of the internal circuit, of the external structure of the radio or any programming in violation of the current regulations will automatically void the product certification and your right to use the product. INTEK S.R.L. declines any responsibility concerning any modification of the product, made by the user or by a third party, after delivery of the product.

CE 0678 ⓘ

RoHS
2002/95/EC

General Information

Thank you !

Thank you for choosing INTEK for your amateur radio applications. This user friendly transceiver will provide you with clear and reliable communications and will keep your professional activities at peak efficiency. This transceiver incorporates the latest and most advanced technology, so you will be pleased with its quality and its technical features.

Important notice !

The use of VHF and UHF FM transceivers is subject to the regulations applied in the country where the product has to be used. As regulations are usually subject to possible modifications, please check the current regulations in your country with your dealer or local supplier. INTEK does not take any responsibility for illegal use and operation of this product not in accordance with the regulation of the country where the product is used.

Safety notice

The user must know and understand the common risks related to the use of transceivers. Do not use the transceiver in environments at risk of explosion (where there are gas, dusts, smokes, etc.). Do not use the transceiver in service areas or fuel stations, on board aircrafts, etc.

Cautions

Please observe the following precautions, in order to avoid causing fire, personal injuries or damage to the radio:

- It is suggested that each transmitted message lasts a few minutes only, since very long transmissions at the maximum transmitter RF output power may overheat the transmitter.

General Information

- Do not alter or modify in any way your transceiver.
- Do not expose the transceiver for a long time to direct sunlight and do not place it close to heat sources.
- Do not expose the transceiver to excessively dusty or damp places, do not place it on unstable surfaces.
- In case of anomalous smell or smoke that leaks out from the transceiver, turn it off immediately and remove the battery pack. Please contact an authorised service center.
- Please do not dispose off used battery with common garbage. Please use the dedicated disposal containers.

Important notice !

The use of VHF and UHF FM transceivers is subject to the regulations applied in the country where the product has to be used. As regulations are usually subject to possible modifications, please check the current regulations in your country with your dealer or local supplier. INTEK does not take any responsibility for illegal use and operation of this product not in accordance with the regulation of the country where the product is used.

User Information

in accordance with art. 13 of the Legislative Decree of 25th July 2005, no. 15 "Implementation of Directives 2002/95/EC, 2002/96/EC and 2003/108/EC, relative to reduction of the use of hazardous substances in electrical and electronic equipment, in addition to waste disposal".

The crossed bin symbol shown on the equipment indicates that at the end of its working life the product must be collected separately from other waste. The user must therefore take the above equipment to the appropriate differentiated collection centres for electronic and electro technical waste, or return it to the dealer when purchasing a new appliance of equivalent type, in a ratio of one to one.

Appropriate differentiated waste collection for subsequent recycling, treatment and environment-friendly disposal of the discarded equipment helps to prevent possible negative environmental and health effects and encourages recycling of the component materials of the equipment.

Illegal disposal of the product by the user will be punished by application of the administrative fines provided for by the legislative decree no. 22/1997 (article 50 and following of the legislative decree no. 22/1997).

User Safety, Training, and General Information

READ THIS IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION BEFORE USING YOUR PORTABLE TWO-WAY RADIO.

Operational Instructions and Training Guidelines

To ensure optimal performance and compliance with the occupationa/controlled environment RF energy exposure limits in the aboves standards and guidelines users should transmit no more than 50% of the time and always adhere to the following procedures:

Transmit and Receive

To transmit (talk), push the Push-To-Talk (PTT) button; to receive, release the PTT button.

Hand-held Radio Operation

Hold the radio in a vertical position with the microphone 5 cm away from the lips and let the antenna farther away from your head.

NOTE ⚠

» The approved batteries supplied with this radio are rated for a 5-5-90 duty cycle.
(5% talk, 5% listen, 90% stand-by).

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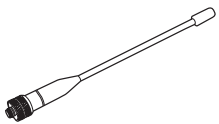
Unpacking and Checking Parts

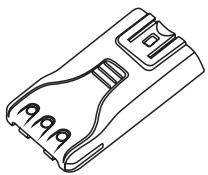
Carefully unpack the product. Please identify all the parts listed below, before wasting the packaging. If any part is missing or if the packaging shows any damage, please contact your dealer immediately.

Supplied accessories

Transceiver

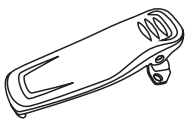


SMA Antenna



Li-ion battery pack

Intelligent charger



Beltclip

Handstrap

User's manual

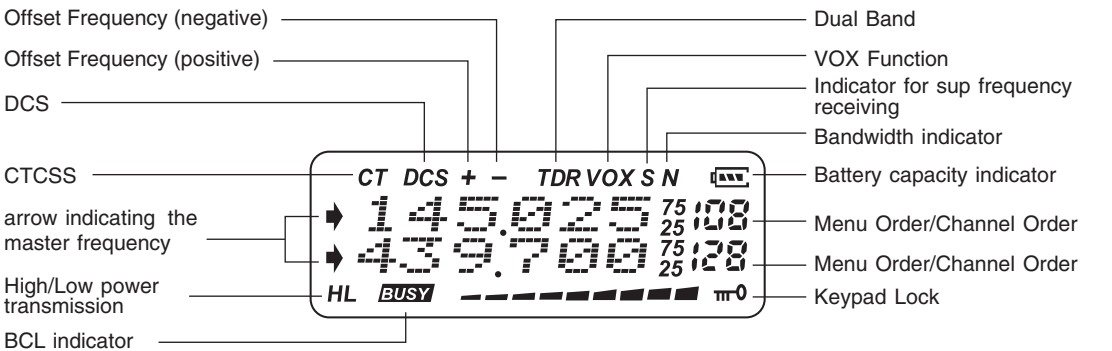
Features

1. Dual Band, Dual Frequency, Dual Display and Dual Standby
2. Frequency Range : 136-174 MHz / 400-470MHz
   FM Radio (88-108MHz)
3. Work Mode: V-U, U-V, V-V, U-U
4. Digital FM Radio (88-108MHz)
5. VOX (Handsfree Operation)
6. Power Output: 5W VHF / 4W UHF
7. CTCSS (50 Groups), DCS (105 groups)
8. Wide/Narrow Bandwidth Selection (25KHz / 12.5KHz)
9. 1750 Hz Tone
10. Multi-Display Function (Channel Number/Frequency/Channel Name Modes)
11. Multi-function Scan
12. 128 Channels
13. Bright LED Flashlight
14. Frequency Steps Selectable (5/6.25/10/12.5/25/37.5/50/100KHz)
15. High / Medium / Low Power Selectable (5W/2.5W/1W)
16. High Capacity Li-ion Battery
17. Intelligent Charger
18. Offset Frequency Setting (0-69.950MHz)
19. Frequency Shift Direction Setting

20. Busy Channel Lock-Out(BCLO)
21. Power-on Message Display (Battery Voltage/Full Screen/Other Message)
22. Roger Beep
23. Low Power Alert
24. Keypad Lock
25. Adding Scanning Channel
26. Wire Clone Function
27. Programmable by Computer
28. Squelch Tail Elimination
29. Timing Shutdown
30. Power On Password

LCD Display

There are various indicators displaying on the screen when powing on. Please refer the below table to learn what the indicators stand for accordingly.



Note:

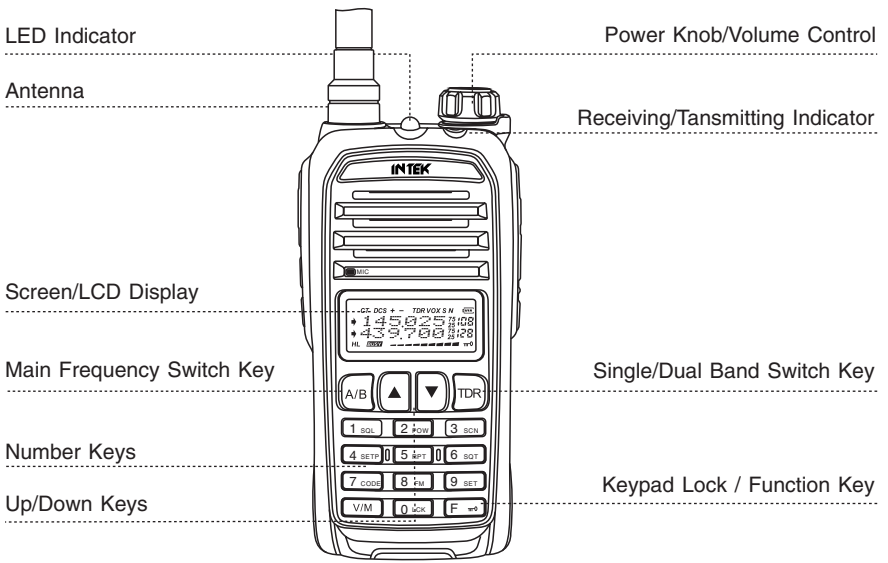
Full indicator for battery capacity

Low indicator for battery capacity

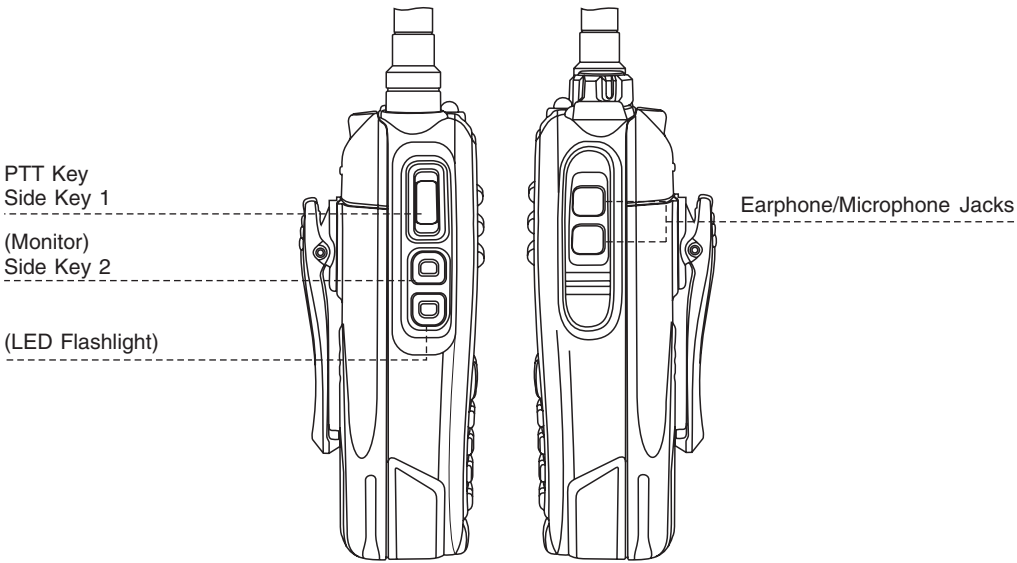
Exhausted indicator for battery capacity

Receiving signal meter

Controls and Indicators



Controls and Indicators



■ Speed Search

Press ▲ or ▼ key to set each Function or Parameter, it can search quickly.

■ Single/Dual Band Switch

Press TDR to switch the Radio between Single/Dual Band Modes.

■ A/B Switch

Press A/B to select the master frequency. The frequency displaying arrowhead is master frequency; the frequency without displaying arrowhead is vice frequency.

■ Side Key 2

Press Side Key 2 to Turn On/Off the LED Flashlight.

■ Frequency Mode and Channel Mode Switch

Press V/M to swich between Frequency Mode and Channel Mode.

1. Frequency Mode.
2. Channel Mode (Frequency+Channel No./ Channel No. / Channel Name).

(NOTE: Channel Mode is AVAILABLE only when there is more than one channel).

Shortcut Operation

■ Scan Adding Switch

Press F + 0 LCK to enter the Scan Adding Switch.

■ Squelch Level Setting

Press F + 1 SQL to enter the Squelch Level Setting.

Press ▲/▼ to select the level and Press F to exit.

■ High/Medium/Low Power Setting

Press F + 2 POW to enter the High/Medium/Low Power Setting.

Press ▲/▼ to select the power and Press F to exit.

■ Scan Function Setting

Press F + 3 SCN to enter Scan Function Setting.

Press ▲/▼ to Forward/Backward Scan and press any key to exit.

■ Frequency Steps Setting

Press F + 4 SETP to enter Frequency Steps setting.

Press ▲/▼ to select the Frequency Steps and Press F to exit.

Frequency Shift Direction

Press F + 5 RPT to select Shift Direction as Positive Offset (+), Negative Offset (-) or Turn Off Shift Direction (OFF).

CTCSS/DCS Modes Setting

Press F + 6 SQT to enter CTCSS/DCS Setting.

Press ▲ / ▼ to select the following settings and Press F to exit.

1.OFF: Turn off CTCSS/DCS
2.TONE: ONLY Transmit with CTCSS Code
3.CTCSS: Tx/Rx both with CTCSS Code
4.D CODE: ONLY Transmit with DCS Code
5.DCS: Tx/Rx both with DCS Code
6.TDCS: Tx with CTCSS, Rx with DCS
7.D TSQL: Tx with DCS, Rx with CTCSS

CTCSS/DCS Codes Setting

Press F + 7 CODE to enter CTCSS/DCS Codes Setting.

Press ▲ / ▼ to select the Rx CTCSS/DCS Codes,

then Press F to select Tx CTCSS/DCS Codes, And Press again F to exit.

Shortcut Operation

FM Radio

Press F + 8 FM to enter FM Radio.

1. NOTE :

A. use “0-9” to directly enter the FM Radio Frequency.

B. Press ▲ / ▼ to Adjust or Scan the FM Radio Frequency and Press F + 8 FM to exit.

2. How to Save the FM Radio Frequency:

When you find the right Frequency, Press F and use ▲ / ▼ to choose the Channel No.(Max. 25 Channels), then press V/M to Save.

3. FM Radio Channel Mode:

A. On FM Radio Mode, Press V/M to switch FM Radio Frequency Mode or Channel Mode.

B. On FM Radio Channel Mode, Press ▲ / ▼ to choose the Channel you saved.

Channel Saving and Deleting

In Frequency Mode, input the Tx/Rx Frequency and other parameters,

Press F and use ▲ / ▼ to choose the Channel No., then press to V/M Save

(NOTE: You can also use Offset Frequency Function to set different Frequency for Tx and Rx).

Hold and Turn on the Radio to choose:

1. ALLRST: All Data Reset
2. SETRST: Parts Reset (Datas in Frequency Modes Reset, but Data in Channel Mode Remain)
3. MENCLR: Delete present Channels
4. M-ONLY: Lock as Storage Mode (display CH-XXX)

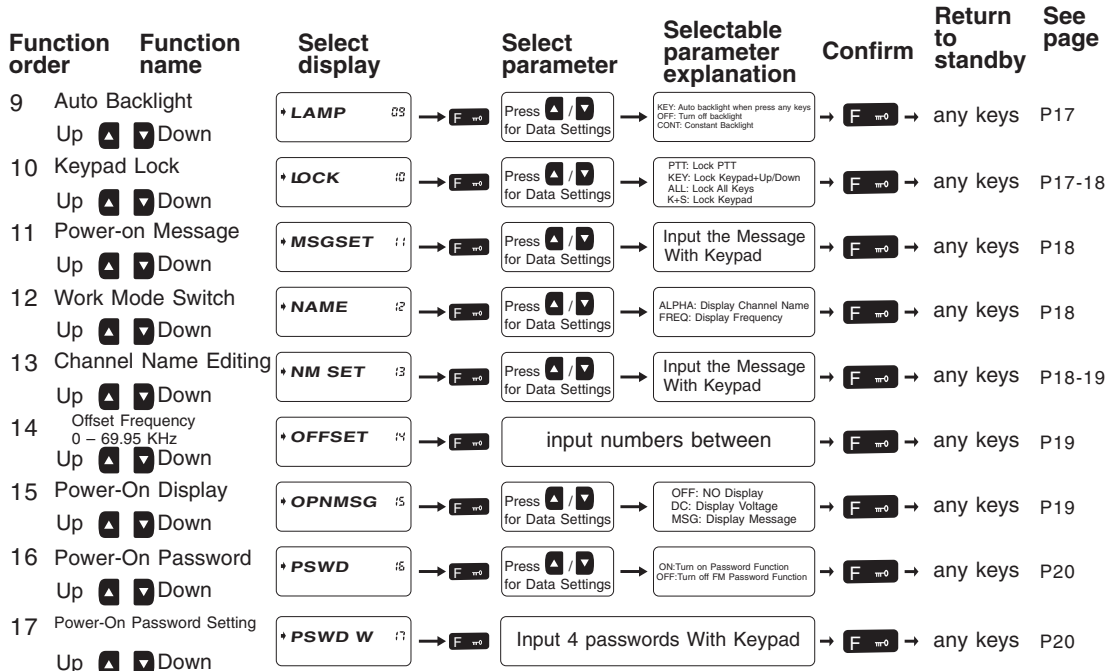
After all setting, Press F to confirm and exit.

Shortcut Operation Sheet

Press F mr0 + 9 SET to enter Menu Mode, use ▲ / ▼ for Data Settings.

Function order	Function name	Select display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
1	Auto Shutdown Up ▲ ▼ Down	APO 01	F mr0 → Press ▲ / ▼ for Data Settings	16 Options: 1-15Hours, OFF	→ F mr0	any keys	P14
2	Scan Adding Up ▲ ▼ Down	SCNADD 02	F mr0 → Press ▲ / ▼ for Data Settings	ON:Turn on Scan Adding OFF:Turn off Scan Adding	→ F mr0	any keys	P14
3	Power Saving Up ▲ ▼ Down	BATSAV 03	F mr0 → Press ▲ / ▼ for Data Settings	ON:Turn on Power Saving OFF:Turn off Power Saving	→ F mr0	any keys	P14
4	Busy Channel Lock-Out Up ▲ ▼ Down	BCLO 04	F mr0 → Press ▲ / ▼ for Data Settings	ON:Turn on Busy Channel Lock-Out OFF:Turn off Busy Channel Lock-Out	→ F mr0	any keys	P15
5	Beep Prompt Up ▲ ▼ Down	BEEP 05	F mr0 → Press ▲ / ▼ for Data Settings	ON:Turn on Beep Prompt OFF:Turn off Beep Prompt	→ F mr0	any keys	P15
6	FM Radio Scan Up ▲ ▼ Down	FMAUTO 06	F mr0 → Press ▲ / ▼ for Data Settings	ON:Turn on FM Radio Scan OFF:Turn off FM Radio Scan	→ F mr0	any keys	P16
7	Voltage Display Up ▲ ▼ Down	DC VLT 07	F mr0 → Press ▲ / ▼ for Data Settings	Display the present Voltage	→ F mr0	any keys	P16
8	FM Radio Dual Watch Up ▲ ▼ Down	DW 08	F mr0 → Press ▲ / ▼ for Data Settings	ON:Turn on FM Radio Dual Watch OFF:Turn off FM Radio Dual Watch	→ F mr0	any keys	P16-17

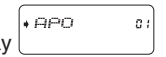
Shortcut Operation Sheet



Shortcut Operation Sheet

Function order	Function name	Select display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
18	Roger Beep Up ▲ ▼ Down	*ROGER 18	Press ▲/▼ for Data Settings	ON:Turn on Roger Beep OFF:Turn off Roger Beep	F ⇒0	any keys	P20-21
19	Scan Mode Up ▲ ▼ Down	*SCN MD 19	Press ▲/▼ for Data Settings	TO: Time Mode Scan CO: Carrier Mode Scan	F ⇒0	any keys	P21
20	Squelch Tail Elimination Up ▲ ▼ Down	*STE 20	Press ▲/▼ for Data Settings	ON:Turn on Squelch Tail Elimination OFF:Turn off Squelch Tail Elimination	F ⇒0	any keys	P21
21	Transmit Overtime Alarm Up ▲ ▼ Down	*TOT 21	Press ▲/▼ for Data Settings	Time Out Timer 1Min -7 Min	F ⇒0	any keys	P22
22	Transmit Prohibit Up ▲ ▼ Down	*TXSTOP 22	Press ▲/▼ for Data Settings	ON:Turn on Transmit Prohibit OFF:Turn off Transmit Prohibit	F ⇒0	any keys	P22
23	VOX Up ▲ ▼ Down	*VOX 23	Press ▲/▼ for Data Settings	ON:Turn on VOX OFF:Turn off VOX	F ⇒0	any keys	P22-23
24	VOX Delay Up ▲ ▼ Down	*VOX D 24	Press ▲/▼ for Data Settings	1S – 4S VOX Delay	F ⇒0	any keys	P23
25	VOX Sensitivity Up ▲ ▼ Down	*VOX S 25	Press ▲/▼ for Data Settings	VOX Level: 1-8	F ⇒0	any keys	P23-24
26	Wide/Narrow Band Up ▲ ▼ Down	*WIDNAR 26	Press ▲/▼ for Data Settings	WIDE: Wide Band(25K) NARR: Narrow Band (12.5K)	F ⇒0	any keys	P20

Timing Shutdown (APO) - Menu 1

In Standby, Press F + 9 SET to enter the Menu, press ▲ / ▼ to enter Menu 1, Screen Display 

Press F to enter and ▲ / ▼ to choose the time, Press F to confirm and return to Main Menu.

(Now you can Press ▲ / ▼ to enter other menu or press any keys to Standby Mode).

Scan Adding (SCNADD) - Menu 2

In Standby, Press F + 9 SET to enter the Menu, press ▲ / ▼ to enter Menu 2, Screen Display

Press F to enter and ▲ / ▼ to choose ① ON: Turn on Scan Adding or ② OFF: Turn off Scan Adding.
Press F to confirm and return to Main Menu.

(Now you can Press ▲ / ▼ to enter other menu or press any keys to Standby Mode).

Power Saving (BATSAV) - Menu 3

In Standby, Press F + 9 SET to enter the Menu, press ▲ / ▼ to enter Menu 3, Screen Display

Press F to enter and ▲ / ▼ to choose ① ON: Turn on Power Saving or ② OFF: Turn off Power Saving.

Press F to confirm and return to Main Menu.

(Now you can Press ▲ / ▼ to enter other menu or press any keys to Standby Mode).

Busy Channel Lock-Out (BCLO) - Menu 4

This function is to prevent the interference of other communicating channels, If the selected channel was occupied, press"PTT", the transceiver can not transmit.

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 4, Screen Display

Press F enter and ▲/▼ to Turn On/Off this Function, Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

BEEP Prompt (BEEP) - Menu 5

Beep prompting function is prompting the confirmed operation, wrong operation or malfunction

We kindly suggest you to turn on this function to avoid any possible malfunction.

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 5, Screen Display

Press F enter and ▲/▼ to Turn On/Off this Function, Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

FM Scan Mode (FMAUTO) - Menu 6

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 6, Screen Display

Press F to enter and ▲/▼ to Turn On/Off this Function, Press F to confirm and return to Main Menu.
(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Voltage Display (DC VLT) - Menu 7

In Standby, Press F + 9 SET to enter the Menu, press ▲/▼ to enter Menu 7, Screen Display

Press F to enter and ▲/▼ will show the present battery voltage, Press F to confirm and return to Main Menu.
(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

FM Radio Dual Watch (DW) - Menu 8

You can still receive the signals in FM Radio Mode with this function.
Turn on this function is Recommended so that Transceiver can always standby.
In Standby, Press F + 9 SET to enter the Menu, press ▲/▼ to enter Menu 8, Screen Display

Press F to enter and ▲/▼ to Turn On/Off this Function, Press F to confirm and return to Main Menu.
(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

■ Auto Backlight (LAMP) - Menu 9

In Standby, Press F + 9 SET to enter the Menu, press ▲/▼ to enter Menu 9, Screen Display

Press F to enter and ▲/▼ to choose ① KEY: Auto Backlight (Auto Backlight for 3 seconds when press any keys) or ② CONT: Constant Backlight or ③ OFF: Turn off Backlight, Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

■ Keypad Lock (LOCK) - Menu 10

In Standby, Press F + 9 SET to enter the Menu, press ▲/▼ to enter Menu 10, Screen Display

Press F to enter and ▲/▼ to choose ① PTT: ONLY PTT Lock or ② K+S: Lock Keypad + Up/Down or ③ ALL: Lock all keys or ④ KEY: Lock Keypad

Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Power-on Message Setting (MSGSET) - Menu 11

In Standby, Press F + 9 SET to enter the Menu, press ▲ / ▼ to enter Menu 11, Screen Display

Press F to enter and ▲ / ▼ to choose "0-9, A-Z, -, +, *", Press 9 SET to edit next Character or 7 CODE to delete the Character.(This is also available with Programming Software)

After Input the message, Press F to confirm and return to Main Menu.

(Now you can Press ▲ / ▼ to enter other menu or press any keys to Standby Mode)

Auto Backlight (LAMP) - Menu 12

In Standby, Press F + 9 SET to enter the Menu, press ▲ / ▼ to enter Menu 12, Screen Display

Press F to enter and ▲ / ▼ to choose ① ALPHA: show Channel Name or ② FREQ: show Frequency,

Press F to confirm and return to Main Menu.

(Now you can Press ▲ / ▼ to enter other menu or press any keys to Standby Mode)

Channel Name Editing (NM SET) - Menu 13

In Standby, Press F + 9 SET to enter the Menu, press ▲ / ▼ to enter Menu 13, Screen Display

Press F to enter and ▲ / ▼ to choose "0-9, A-Z, -, +, *", Press 9 SET to edit next Character or 7 CODE to delete the Character.(This is also available with Programming Software).

After Input the message, Press F to confirm and return to Main Menu.

(Now you can Press ▲ / ▼ to enter other menu or press any keys to Standby Mode)

Offset Frequency (OFFSET) - Menu 14

Offset frequency means the difference between Tx and Rx frequency. This transceiver's offset frequency range is between o to 69.950 MHz.

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 14, Screen Display

Press F to enter and ▲/▼ input the exact offset frequency you want with keypad.

Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Power-On Message Display (OPNMSG) - Menu 15

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 15, Screen Display

Press F to enter and ▲/▼ to choose ① OFF: No display or ②DC: Display Battery Voltage or ③MSG: Display Message Edited, Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

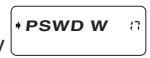
Power-on Password Function (PSWD) - Menu 16

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 16, Screen Display

Press F to enter and ▲/▼ to Turn On/Off this Function, Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Power-on Password Setting (PSWD W) - Menu 17

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 17, Screen Display 

Press F to enter and input the 4 Passwords with keypad.

Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Roger Beep (ROGER) - Menu 18

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 18, Screen Display

Press F to enter and ▲/▼ to Turn On/Off this Function, Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Scan Mode (SCN MD) - Menu 19

In Standby, Press F + 9 SET to enter the Menu, press ▲/▼ to enter Menu 19, Screen Display

Press F to enter and ▲/▼ to choose ① TO: When receiving signals, it will go on scanning without any operation with 5 seconds. or ② CO: It will stop scanning when receiving signals, while go on scanning after signal disappeared 3 seconds.

Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Squelch Tail Elimination (STE) - Menu 20

In Standby, Press F + 9 SET to enter the Menu, press ▲/▼ to enter Menu 20, Screen Display

Press F to enter and ▲/▼ to Turn On/Off this Function, Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Transmit Overtime Alarm (TOT) - Menu 21

TOT is designed to prevent transmitting the transceivers too long. When operating exceed the preset time, it will stop transmitting and a warning sound can be heard.

In Standby, Press F m0 + 9 SET to enter the Menu, press ▲/▼ to enter Menu 21, Screen Display

Press F m0 to enter and ▲/▼ to choose time from "1min – 7min".

Press F m0 to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

Transmit Prohibit (TXSTOP) - Menu 22

In Standby, Press F m0 + 9 SET to enter the Menu, press ▲/▼ to enter Menu 22, Screen Display

Press F m0 to enter and ▲/▼ to Turn On/Off this Function, Press F m0 to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode).

VOX (VOX) - Menu 23

When the voice shows, the transceiver will switch to transmit mode automatically.

As the VOX should check the voice, transmitting will be a little delaying, and the beginning voice may not be transmitted.

In Standby, Press F + 9 SET to enter the Menu, press ▲/ ▼ to enter Menu 23, Screen Display

Press F to enter and ▲ / ▼ to Turn On/Off this Function, Press F to confirm and return to Main Menu.

(Now you can Press ▲/ ▼ to enter other menu or press any keys to Standby Mode).

VOX Delay (VOX D) - Menu 24

In Standby, Press F + 9 SET to enter the Menu, press ▲/ ▼ to enter Menu 24, Screen Display

Press F to enter and ▲ / ▼ to choose time from “1s – 4s”, Press F to confirm and return to Main Menu.

(Now you can Press ▲/ ▼ to enter other menu or press any keys to Standby Mode).

VOX Sensitivity (VOX S) - Menu 25

In Standby, Press F + 9 SET to enter the Menu, press ▲/ ▼ to enter Menu 25, Screen Display

Press F to enter and ▲ / ▼ to choose level from “1 – 8” (Level 1 is the highest sensitivity while Level 8 is the lowest).

Press F to confirm and return to Main Menu.

(Now you can Press ▲/ ▼ to enter other menu or press any keys to Standby Mode).

Wide Narrow Band (WN) - Menu 26

In Standby, Press F +9 SET to enter the Menu, press ▲/▼ to enter Menu 24, Screen Display

Press F to enter and ▲/▼ to choose ① WIDE: Wide Band(25KHz) or ② NARROW: Narrow Band(12.5KHz) , Press F to confirm and return to Main Menu.

(Now you can Press ▲/▼ to enter other menu or press any keys to Standby Mode)

1750 Hz Repeater Tone

Press and hold the "PTT" key then press the "LED Flashlight" key to transmit the 1750 Hz Tone.

Low Power Warning

When the Battery is low power, the transceiver will sound “DiDi” , LED Indicator flashing Red and Flashing on Screen.

Transmit Overtime Prompt

When transceiver transmits beyond the limited time, there will be a sound warning “DU DU” and stop transmitting. Press PTT to transmit again. (Setting Transmit Over Timer, pls see page 22).

How to use Intelligent Charger

1. Insert the AC plug into the outlet (AC:90-240V), the charger indicator flashes, it means enter charging standby.
2. Insert the battery into the charger, the RED indicator turns on, it means charging, while GREEN indicator turns on, it means fully charged.

Troubleshooting

Please check cardfully if your transceiver has problems by following this chart.
If you maintain to have trouble you can reset your transceiver and very often this will eliminate your problem.

Problem	Solution
Cannot power on, no power	**1.** The battery may exhausted, pls change the new battery or re-charge. **2.** The battery install incorrect, pls take out the battery and re-install.
Battery life not long	**1.** The battery life is over, pls change a new battery. **2.** Not charging completely, be make sure fully charged before take out.
Receive light turn on but no sounds	**1.** Make sure the volume is highest **2.** Make sure the CTCSS/DCS code is the same with other members.
Keypad do not work	**1.** Make sure the keypad is locked or not. **2.** Make sure any other key stuck.
In standby, it will auto- transmit without pressing PTT	Make sure VOX function is ON or not, and its level is set too low or not.

Troubleshooting

Problem	Solution
Some functions can not be stored	Make sure work in Channel mode. Some functions can be set only via programming software in Channel mode.
Receive other groups signal while communicating	Pls change another CTCSS/DCS code of your group.

CTCSS Tone Frequency Chart

CTCSS									
1	67.0	11	94.8	21	131.8	31	171.3	41	203.5
2	69.3	12	97.4	22	136.5	32	173.8	42	206.5
3	71.9	13	100.0	23	141.3	33	177.3	43	210.7
4	74.4	14	103.5	24	146.2	34	179.9	44	218.1
5	77.0	15	107.2	25	151.4	35	183.5	45	225.7
6	79.7	16	110.9	26	156.7	36	186.2	46	229.1
7	82.5	17	114.8	27	159.8	37	189.9	47	233.6
8	85.4	18	118.8	28	162.2	38	192.8	48	241.8
9	88.5	19	123.0	29	165.5	39	196.6	49	250.3
10	91.5	20	127.3	30	167.9	40	199.5	50	254.1

DCS Tone Frequency Chart

DCS

1	D023N	16	D074N	31	D165N	46	D261N	61	D356N
2	D025N	17	D114N	32	D172N	47	D263N	62	D364N
3	D026N	18	D115N	33	D174N	48	D265N	63	D365N
4	D031N	19	D116N	34	D205N	49	D266N	64	D371N
5	D032N	20	D122N	35	D212N	50	D271N	65	D411N
6	D036N	21	D125N	36	D223N	51	D274N	66	D412N
7	D043N	22	D131N	37	D225N	52	D306N	67	D413N
8	D047N	23	D132N	38	D226N	53	D311N	68	D423N
9	D051N	24	D134N	39	D243N	54	D315N	69	D431N
10	D053N	25	D143N	40	D244N	55	D325N	70	D432N
11	D054N	26	D145N	41	D245N	56	D331N	71	D445N
12	D065N	27	D152N	42	D246N	57	D332N	72	D446N
13	D071N	28	D155N	43	D251N	58	D343N	73	D452N
14	D072N	29	D156N	44	D252N	59	D346N	74	D454N
15	D073N	30	D162N	45	D255N	60	D351N	75	D455N

Specifications

General	
Frequency	VHF 144-146 MHz (136-174.995 MHz) (*)
	UHF 430-440 MHz (400-470.995 MHz) (*)
Channels	128
Channel spacing	5, 6.25, 10, 12.5, 25, 37.5, 50, 100 KHz
DC input voltage	7.2 VDC
Standard Battery	7.2V 2200mAh
Operating temperature	-10° / +60°
Dimensions / Weight	mm 116 x 53 x 35 (main body) / 250 gr.
Receiver	
Sensitivity (12dB Sinad)	< 0.2 µV
Audio output	≥ 500mW
Transmitter	
RF output power	5W (VHF) / 4W (UHF)
Modulation	F3E
Spurious & Harmonics	in compliance with the R&TTE regulations
Maximum deviation	≤ +/- 5KHz
FM Radio	
Frequency range	88-108 MHz WFM

(*) KT-930EX (INTERNATIONAL VERSION) 136-174.995 MHz / 400-470.995 MHz (not available for Europe)

OPTIONAL ACCESSORIES

- KME-315 External Earset-Microphone with tie clip
- KME-614 External Earset-Microphone with adjustable ear hook
- KME-801 External Earset-Microphone for security and bodyguard
- KME-100A External Earset-Microphone with tie clip
- KME-200A External Earset-Microphone with flexible boom mic and tie clip
- KME-H115 External Speaker-Microphone (light duty)
- KST-301 External Speaker-Microphone (heavy duty)
- KPG-33 USB Type PC Interface Cable

INTEK